

FIGURE 1



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FIGURE 2

Heat Extractable/Water Soluble Fraction of Huanglian Root

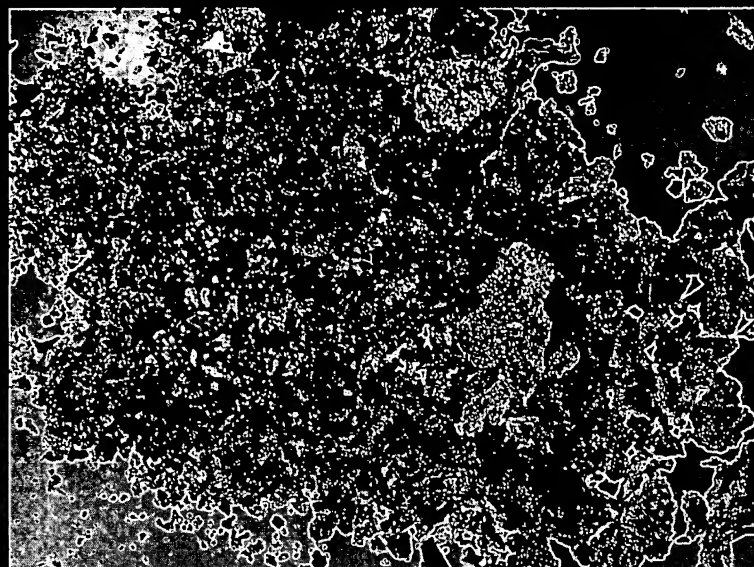


FIGURE 3

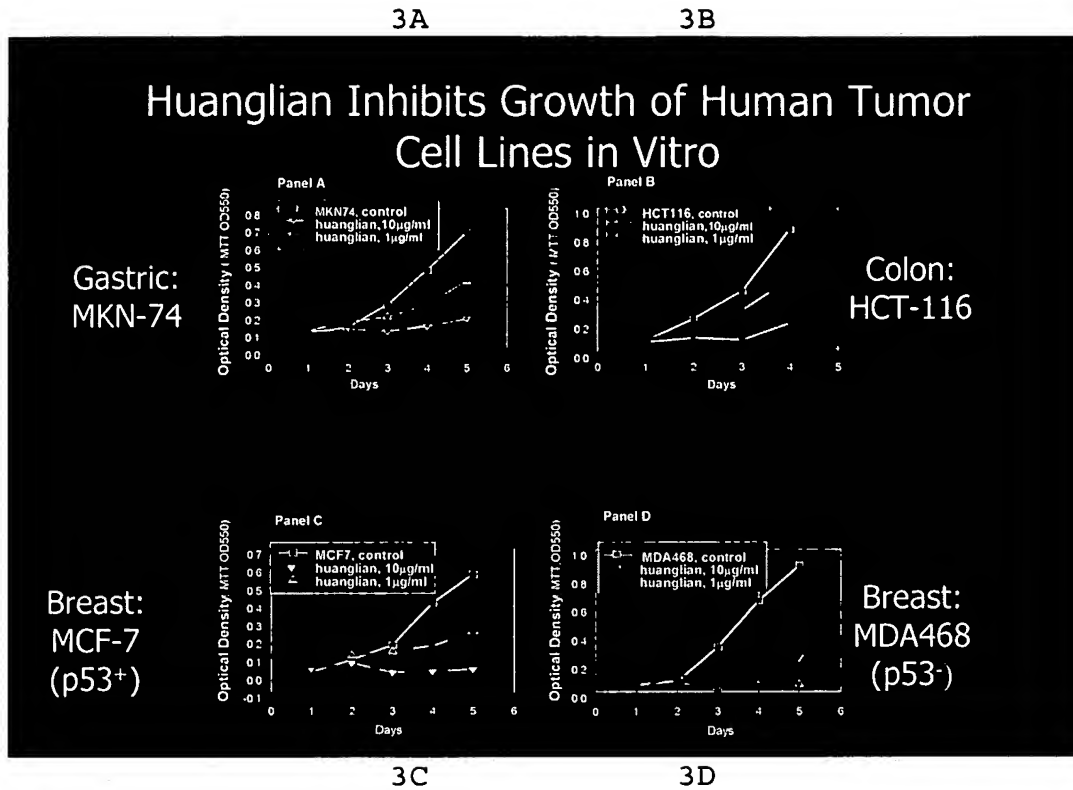
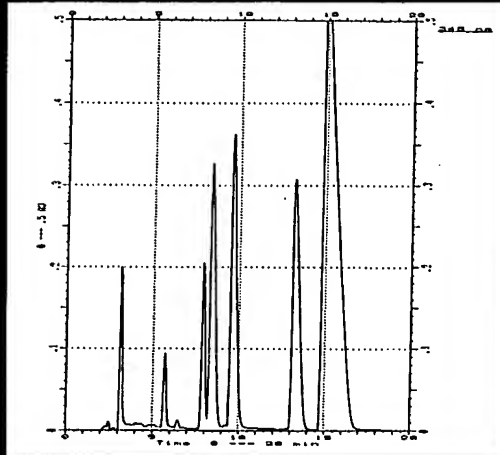


FIGURE 4

Huanglian: 7 Peaks by HPLC with Berberine (peak #7)
Constituting 50% of the Water/Heat Extractable Product

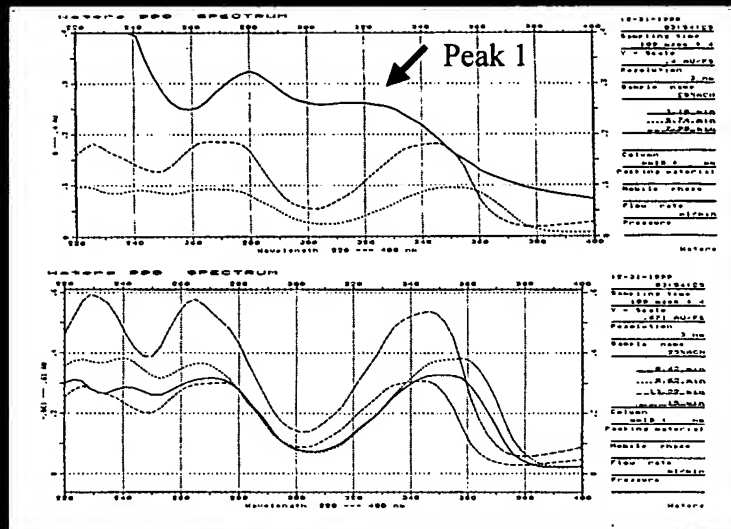


Peak # 7

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FIGURE 5

UV Spectra Indicate All Peaks, but Peak 1, are Berberine or "Berberine-like"



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Figure 6

Growth Inhibitory Effects of Huanglian and Berberine at Half the Huanglian Concentration Against MKN-74 Cells

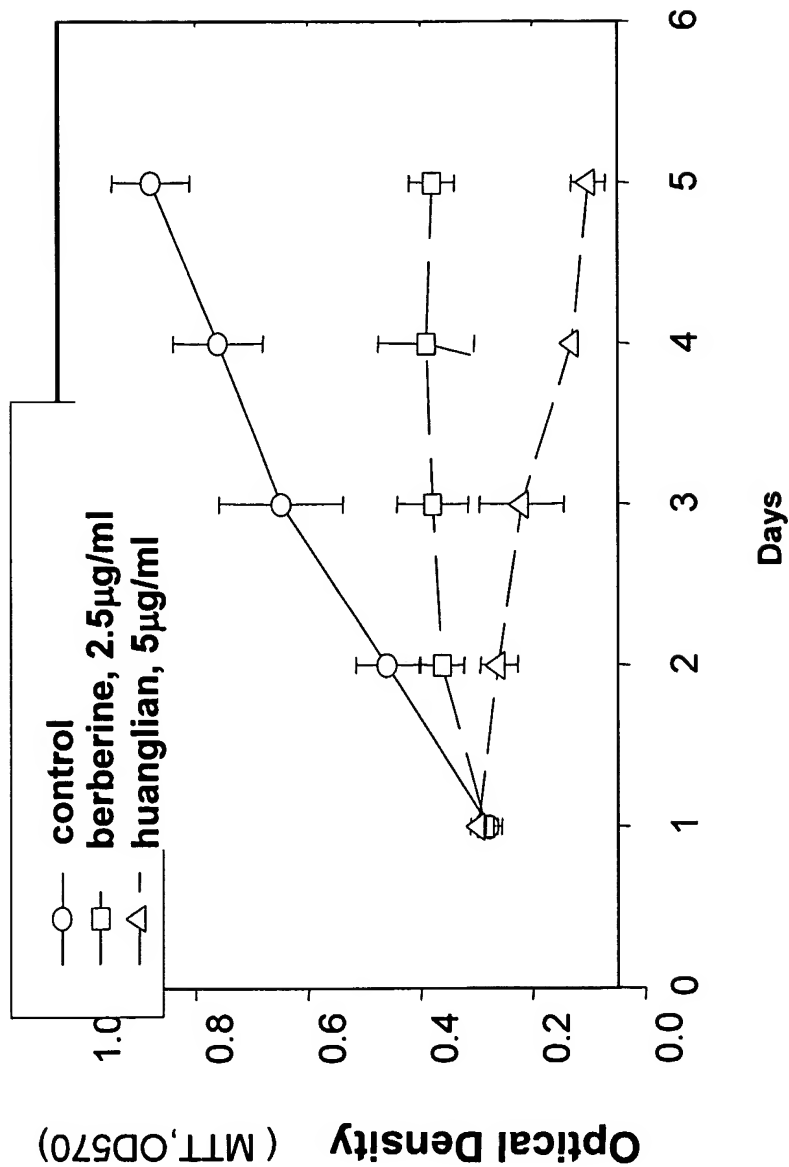


FIGURE 7

Huanglian Inhibits Cyclin B1 Protein Expression and Cyclin B1/cdc2 Kinase Activity in MKN-74 Gastric Cancer Cells: Time and Concentration Dependent

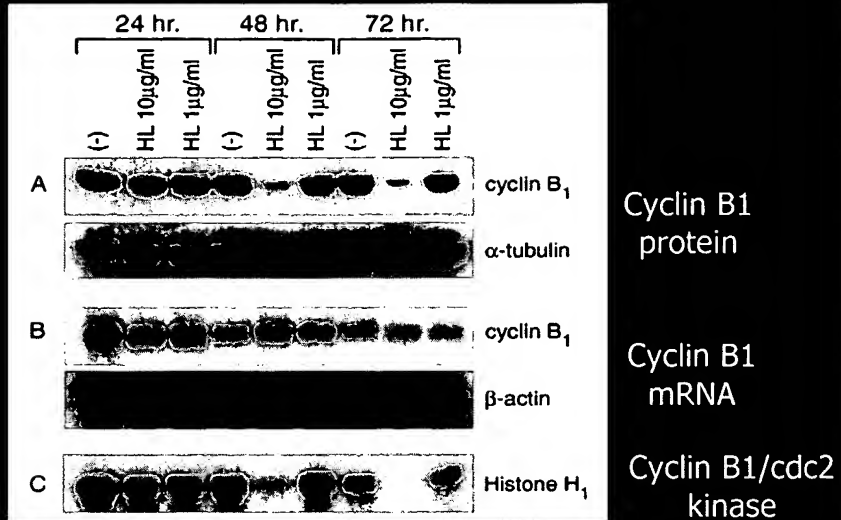


FIGURE 8

Huanglian Induces G2 Arrest in MKN-74
Gastric Cancer Cells in Association with
Inhibition of Cyclin B1/cdc2 Kinase Activity

A

Treatment	G1 (%)	S (%)	G2 (%)	M (%)
(-)	34	47	17	2
NOC ₁₂	5	30	24	41
NOC ₁₂ → (-) ₂₄	20	34	30	16
NOC ₁₂ → HL ₂₄	6	37	54	3

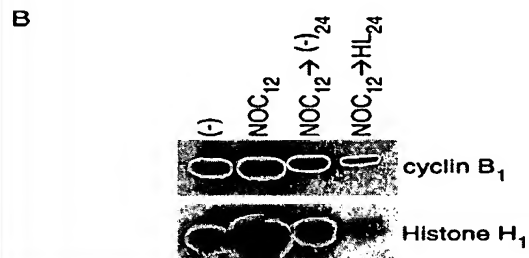
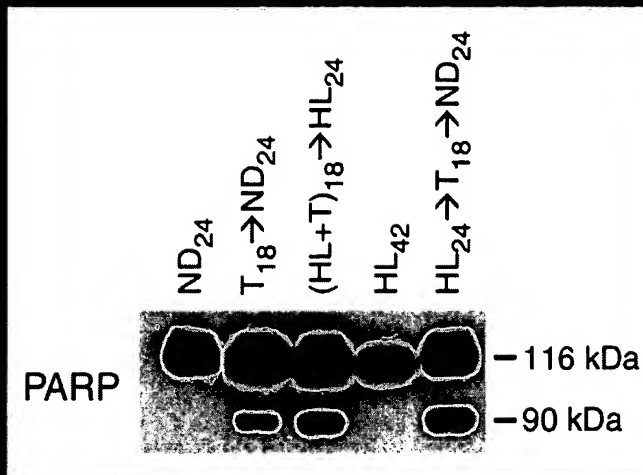


FIGURE 9

Huang Lian Potentiates Taxol-Induced Apoptosis



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FIGURES 10

Effect of Huanglian Metabolites Formed by Human Liver S9 Microsomes on
MKN-74 Gastric Cancer Cell Growth: First Pass Effect

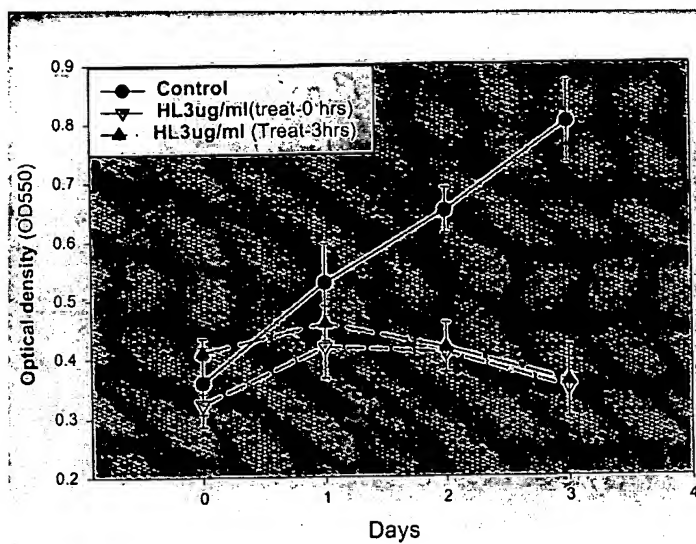


FIGURE 11

Identical Cytotoxicity of Huanglian Water/Heat Soluble Powder and Huanglian Capsules Against the Growth of MKN-74 Gastric Cancer Cells

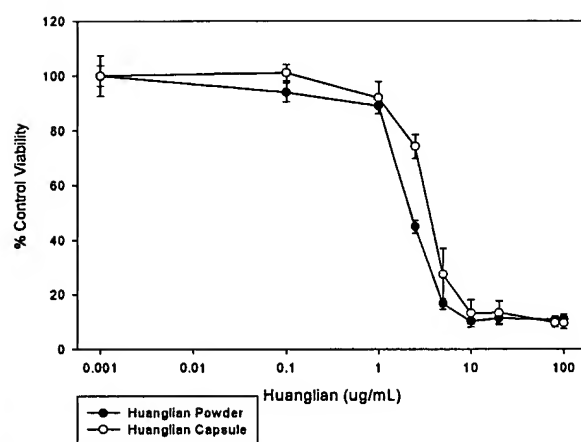
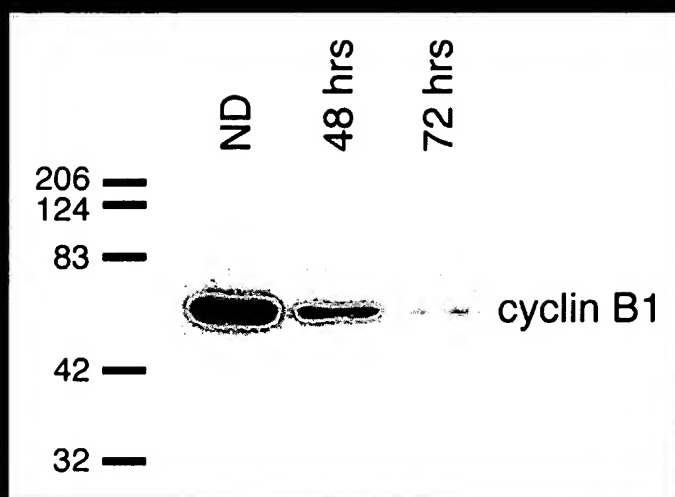


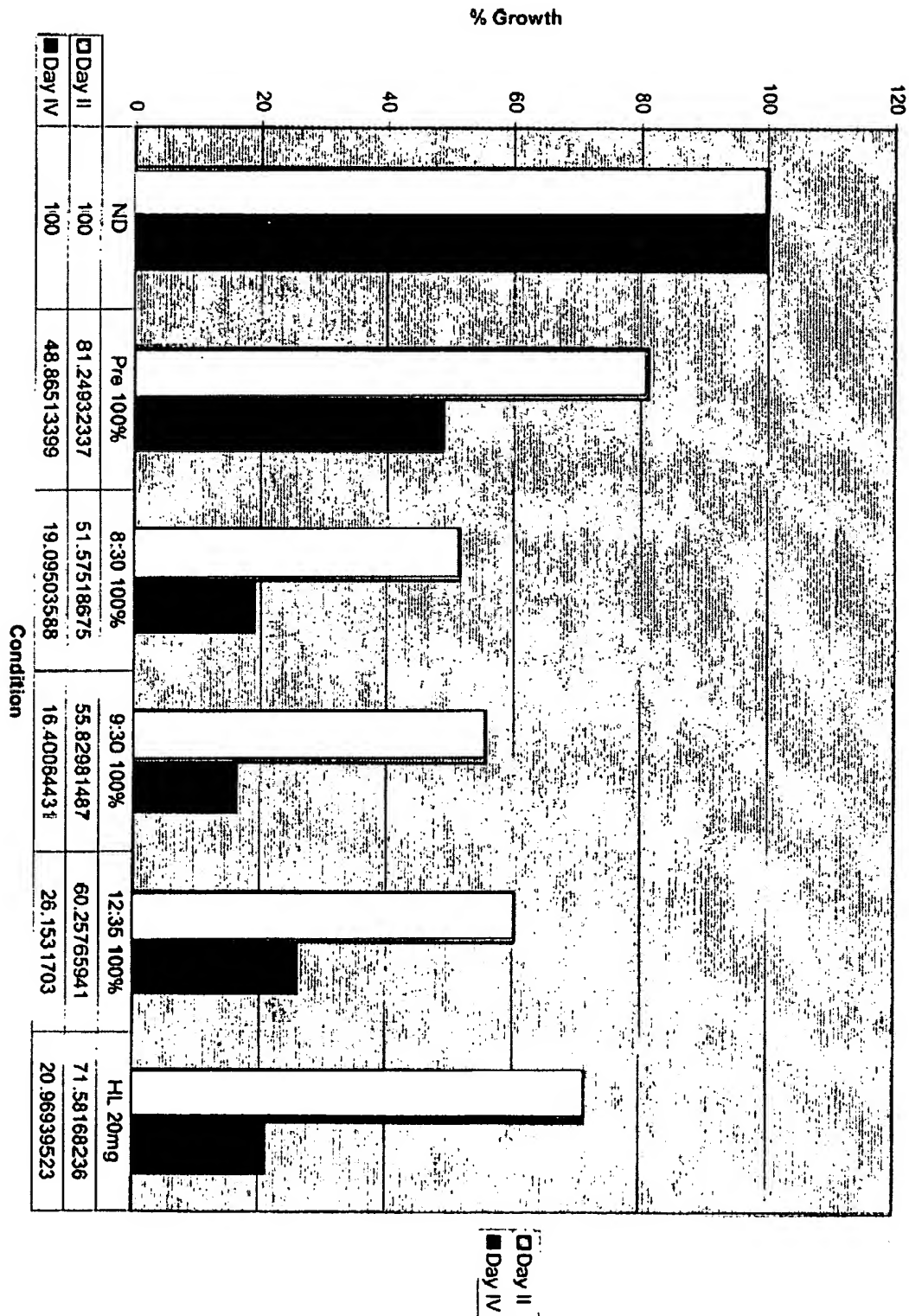
FIGURE 12

Huanglian Capsules Suppress Cyclin B1 Expression



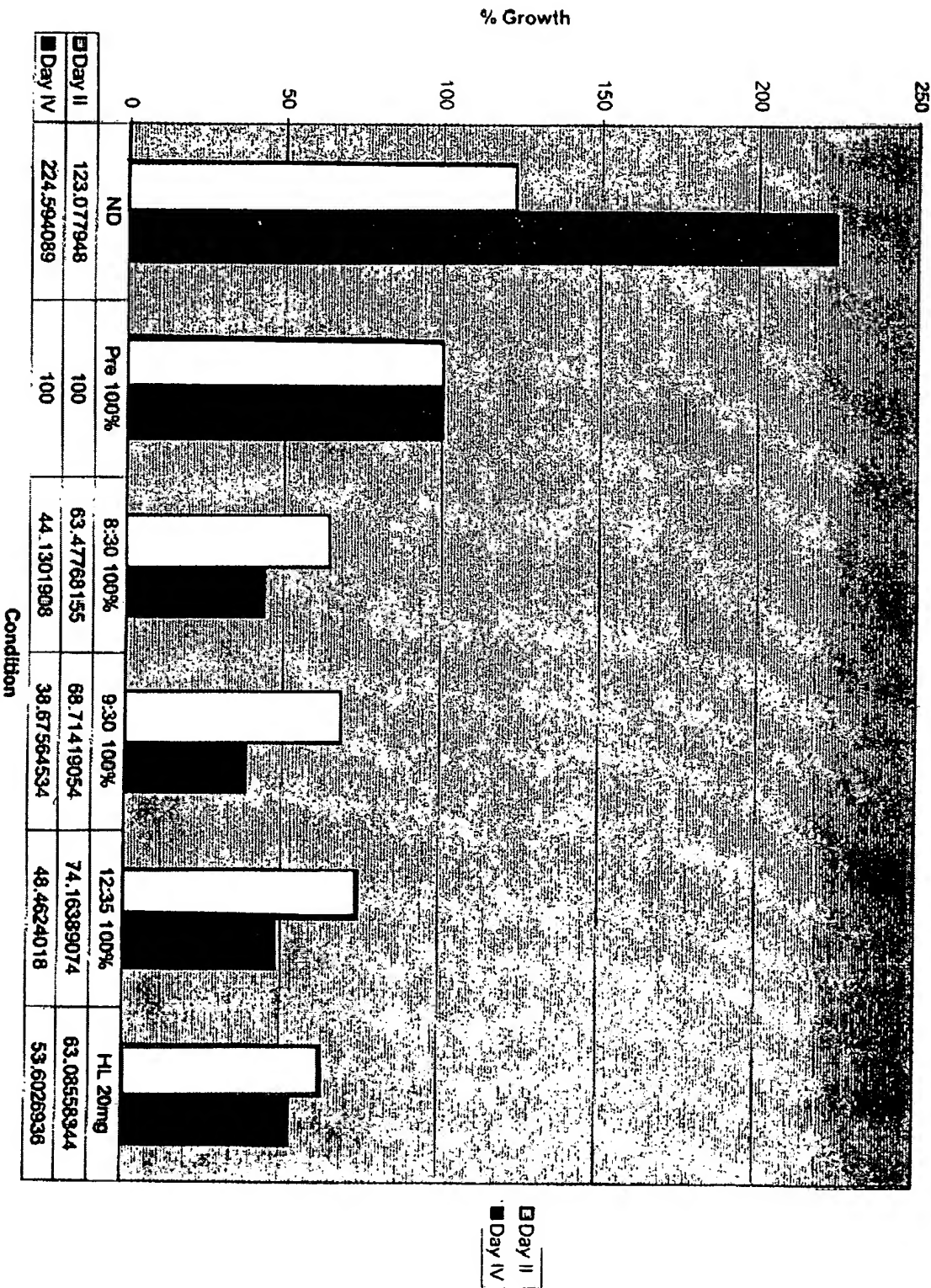
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FIGURE 13



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FIGURE 14



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